

Claims

1. A method for providing a ring back tone service by using a Play Announcement message based on an intelligent network, the method comprising the steps of:
  - (a) receiving information on a receiving terminal from a Mobile Switching Center on the side of the receiving terminal that is required for call receipt;
  - (b) in case that the receiving terminal subscribes to the ring back tone service, forming a communication line between the Mobile Switching Center and the coloring player;
  - (c) in case that the communication line is formed, receiving an Assist Request Instruction from the coloring player;
  - (d) transmitting the Play Announcement message including an identification number of the receiving terminal, to the coloring player; and
  - (e) enabling a sound source corresponding to the identification number of the receiving terminal included in the Play Announcement message to be transmitted from a coloring server to the coloring player, so as to be played.
2. The method of claim 1, wherein communication protocol between the coloring player and the coloring server is Transmission Control Protocol/Internet Protocol (TCP/IP).
3. The method of claim 1, wherein the coloring player recognizes an identification number parameter of the receiving terminal and/or an identification number parameter of a sending terminal that has required the call receipt.
4. The method of claim 1, wherein the coloring player directly interoperates with the coloring server.
5. The method of claim 1, wherein the information of the receiving terminal includes the identification number thereof and/or information on subscription of additional service thereof.
6. The method of claim 1, wherein the mobile switching center includes a Service

Switching Point (SSP) supporting the entire access of the intelligent network.

7. The method of claim 1, wherein the Play Announcement message includes an identification number of a sending terminal that has required the call receipt.

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8. A system for providing a ring back tone service by suing a Play Announcement message based on an intelligent network, the system comprising:

a Mobile Switching Center (MSC) transmitting information of a receiving terminal that is required for call receipt and interoperating with a coloring player, so as to connect a call therebetween;

a Service Control Point (SCP) receiving the information of the receiving terminal from the Mobile Switching Center (MSC), so as to transmit the Play Announcement message (PA message) including an identification number of the receiving terminal;

a coloring player receiving a sound source corresponding to the identification number of the receiving terminal, so as to play the same in a sending terminal that has required the call receipt; and

a Coloring server (CRS) transmitting the sound source corresponding to the identification number of the receiving terminal to the coloring player.

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9. The system of claim 8, further comprising:

a coloring database storing at least one ring back tone sound source data; and

a subscriber database storing personal information on a subscriber who has subscribed to the ring back tone service and information on the ring back tone sound source data selected by each subscriber.

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10. The system of claim 8, wherein the coloring server comprises a coloring database storing at least one ring back tone sound source data and a subscriber database storing personal information on a subscriber who has subscribed to the ring back tone service and information on the ring back tone sound source data selected by each subscriber.

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11. The system of claim 8, wherein the Mobile Switching Center includes a Service Switching Point supporting the entire access of the intelligent network.

12. The system of claim 8, wherein in case that a communication line is formed  
5 between the Mobile Switching Center and the coloring player, the coloring player transmits an Assist Request Instruction to the Service Control Point.

13. The system of claim 8, wherein communication protocol between the Mobile Switching Center and the Service Control Point and/or between the coloring player and  
10 the Service Control Point is Intelligent Network Application Protocol (INAP).

14. The system of claim 8, wherein communication protocol between the Mobile Switching Center and the coloring player is ISDN user part (ISUP) protocol.

15 15. The system of claim 8, wherein communication protocol between the coloring player and the coloring server is Transmission Control Protocol/Internet Protocol (TCP/IP).

16. The system of claim 8, wherein the coloring player recognizes an identification  
20 number parameter of the receiving terminal and/or an identification number parameter of a sending terminal that has required the call receipt, from the Play Announcement message.

17. The system of claim 8, wherein the coloring player directly interoperates with  
25 the coloring server.

18. The system of claim 8, wherein the information on the receiving terminal includes the identification number thereof and/or information on subscription of additional service thereof.

30 19. The system of claim 8, wherein the receiving terminal and the sending terminal include a Personal Digital Assistant (PDA), a cellular phone, a Personal Communication

Service (PCS) phone, a hand-held PC, a Global System for Mobile (GSM) phone, a wideband CDMA phone, an EV-DO phone, an EV-data and voice (DV) phone and a Mobile Broadband System (MBS) phone.

- 5 20. The system of claim 8, wherein the Play Announcement message includes the identification number of the sending terminal.